Health Care Delivery

Physician Communication Skills and Malpractice Claims
A Complex Relationship

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We assessed the relationship between patients' opinions about their physicians' communication skills and the physician's history of medical malpractice claims. The sample consisted of 107 physicians and 2,030 of their patients who had had an operation or a delivery. Although patients tended to give their physicians favorable ratings, they were least satisfied with the amount of explanations they received. Patients gave higher ratings to general surgeons and obstetrician-gynecologists and poorer ratings to orthopedists and anesthesiologists. Women and better-educated patients gave higher ratings on explanations and communication to physicians with fewer claims. Men and patients with less education, however, gave higher ratings on these dimensions to physicians with more claims. These findings suggest the need for physicians to tailor their communications to a patient's individual needs. Improved communication between physicians and patients may result in fewer nonmeritorious malpractice claims while leading to less costly resolution of meritorious claims.

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Communication between physician and patient is a topic of increasing interest to the medical community, possibly because of legal developments in recent years. On the one hand, patients' interests are now protected by informed consent statutes that have been enacted in many states. These statutes require physicians to convey adequate information about medical procedures. On the other hand, the cost of malpractice claims in the United States has risen dramatically in recent years.[1] Some investigators have theorized that poor communication between physicians and their patients may be a major cause of malpractice claims.[2-4] Although the relationship between malpractice claims and physician communication skills has not been assessed directly, there are several sources of evidence that suggest such a relationship.

Physician communication skills have been reported to be generally inadequate. In a review of physician-patient communication research, Waitzkin concluded that patients usually want more information than their physicians provide. He pointed out that physicians may fail to address patients' concerns fully by discouraging questions, interrupting, and focusing on medical history-taking.[5] Similarly, Faden and associates found that patients preferred far more detailed disclosures, especially about risks and alternative therapy, than were routinely offered.[6] Gardner reported that the most frequently cited reasons for malpractice actions were patients' unhappiness with their underlying disease and a lack of communication resulting in patients' failure to anticipate either their level of pain or the cost of medical care.[7] These researchers concluded that the key to preventing malpractice claims lies in honest, open communication at all times, especially when the outcome of treatment is not successful.

In this study we examine the relationship between the number of malpractice claims filed and patients' assessments of their physicians' communication skills. We expected to find that a greater number of malpractice claims would be associated with more negative patient opinions when controlling for number of years in practice.

Physician and patient characteristics were also thought to have a potential effect on this relationship. For physicians, specialty was targeted as an important variable, since the rate of malpractice claims changes according to specialty.[8] For patients, demographic characteristics were considered important because they have been related to satisfaction with medical care in numerous studies. Older, better-educated female patients are generally more satisfied than younger, less-educated male patients.[9]

Based on the above considerations, we expected that physician specialty, along with number of claims, would be related to patients' opinions about physicians' communication skills. Further, we hypothesized that patient demographic characteristics, along with malpractice claims, would be related to their assessment of physicians' communication skills.

Methods

The research was conducted jointly by the Cooperative of American Physicians/Mutual Protection Trust, a physician-owned interindemnity trust, and the Professional Compe-

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tence Assurance Program. The latter is a continuing medical education program that features an educational intervention based on individual physicians' needs.[10,11]

Physician Selection

All potential participants were members of the Cooperative of American Physicians (CAP). They included surgeons, obstetrician-gynecologists, anesthesiologists, and primary care physicians. They practiced in all geographic areas of California. To assure a range in numbers of malpractice claims, recruitment was stratified initially to include both physicians with no claims or one claim during the time they had been CAP members and those with multiple claims. Later, claims received before membership in CAP were added. Each physician was sent a personalized letter by Professional Competence Assurance Program's medical director, along with a letter of endorsement by CAP's educational director. Invitations were sent to 416 members; 107 (26%) agreed to participate.

Patient Selection and Survey Administration

Participating physicians or their office staff were asked to select 30 patients who had had a surgical procedure or a delivery during the previous year and were in hospital for at least one day. They were instructed to use a consecutive listing of patients derived from the appointment schedule or the computer billing system. Patients were eligible only if they were adults who could read and write English.

The study was designed to be as unintrusive as possible. Also, patient confidentiality was preserved by having the surveys mailed directly from the physician to his or her patients. Surveys were sent with a cover letter on the physician's stationery that explained the project and requested that patients complete the surveys and return them, unsigned, to the Professional Competence Assurance Program's office. A reminder postcard was sent to the patients about two weeks after the surveys were mailed.

Physician Sample

The final sample of 107 physicians included 19 general surgeons, 31 orthopedic surgeons, 28 obstetrician-gynecologists, 16 anesthesiologists, 5 primary care physicians, and 8 other surgeons—urologic, plastic, vascular, and neurologic. The average age of participating physicians was 51 years. All were men except for one general surgeon. They had been in practice an average of 19 years. The mean number of total claims, meritorious or not, since beginning practice was 4.45. Fewer physicians (68%) with multiple claims declined the invitation to participate than those who had either no claims or one claim (77%). Participation rates were similar among the surgical subspecialties (ranging from 26% to 29%) but were lower for anesthesiologists (12%).

Patient Sample

Surveys were obtained from 2,030 patients (a response rate of 68%). Of surveys received, 94 (5%) were discarded because they were filled out incorrectly or were missing data. The response rate was similar (65% to 67%) among the surgical subspecialties but was lower among the anesthesiologists (56%). The response rate for patients of physicians with fewer claims was 69%, and that for patients of physicians with multiple claims was 61%. Of all patients, 59% were women, their average age was 51 years, and their average years of education was 13.75.

Patient Survey

Patients' opinions of their relationship with their physicians were assessed by means of a survey developed for this project. Items from other surveys were used or adapted when appropriate. These included assessments of how well the physician communicated, the thoroughness of treatment or examinations, whether the patient's concerns were taken seriously enough, and the accessibility of the physician.[12,13] Items were added to measure the adequacy of informed consent and the helpfulness of the physician's office staff. The survey also included items regarding information or services patients might have wanted. These "patient-need" items were meant to provide an indirect measure of negative patient opinion.

Except for the patient-need items, all items measuring patients' opinions were worded as statements to which the patient could respond on a six-point scale, from "strongly agree" to "strongly disagree." Half the items were positively worded, and half were negatively worded. The patient-need items were scored "yes" or "no." The content and length of the survey varied according to specialty.

The survey for patients of surgeons contained 62 items; obstetrician-gynecologists, 74 items; and primary care physicians, 68 items. The anesthesiologists' survey omitted items relating to accessibility of the physician, helpfulness of office assistants, and items relating to rapport. Seven items specific to anesthesia were added, for a total of 28 items, 21 of which also appeared on the other surveys.

Patient Opinion Scales

The 52 opinion items common to all but the anesthesia survey were subjected to a factor analysis. Patient-level data were used. Six factors accounting for 61% of the variance were obtained. Six scales based on the factors were constructed. Means of available items were used so that anesthesiologists were not penalized by having fewer items. Scales were scored from 0 to 100 and were named to reflect the items of which they were composed: Understanding and Empathy, Competence, Accessibility of Physician, Helpfulness of Office Assistants, Explanations, and Absence of Communication Problems. A seventh scale, Patient Need for Services and Information, was constructed using the mean of the patient-need items.

Statistical Analyses

Physician-level data were used in all analyses. Four series of analyses were done: a set of analyses of covariance and three sets of repeated measures of analyses of covariance. Years in practice was the covariant in all analyses. The dependent variables in each set of analyses were the seven patient-opinion scales. The first set of analyses used claims and specialty as the predictors, the second used claims as predictor and patient sex as the repeated measure, the third used claims as predictor and age as the repeated measure, and the fourth used claims as predictor and education as the repeated measure.

To use patient-level demographic information at the physician level, each demographic variable was converted into a dichotomous variable. To compare the opinion scores of patients with different demographic characteristics, using the physician as the unit of analysis, it was necessary to compute mean scores for physicians at each level of a given demographic variable. Demographic variables that were contin-

uous at the patient level could not be retained as such at the physician level because for many values (levels)—age, for example—there would be few cases. Patient education and age, therefore, were converted to dichotomous variables, although a three-way split may also have been possible.

Patient age was divided into younger (<45 years) and older (≥45 years). Similarly, patient education was divided into less educated (≤12 years) and more educated (>12 years). For each level of a demographic variable, physicians received a score that was the mean opinion score of patients in that demographic group. Because physicians had two scores for each demographic variable, these were within-physician variables and were treated as repeated measures in the major analyses.

Number of claims also was converted to a dichotomous variable by means of a median split (fewer [N = 58] means three or fewer claims; more [N = 59] means more than three claims) so that interactions between claims and the demographic variables could be computed.

The number of physicians in the primary care and other surgical specialties was low, so that these specialties were deleted in any analyses using specialty as a predictor (number lost = 13). Additionally, obstetrician-gynecologists had only women patients, necessitating the deletion of that specialty from any analyses using patient sex as a variable (number lost = 28).

Results

Descriptive Information from Patient Survey

The patients' overall opinions of their physicians were relatively high, with only 15 items receiving an average rating below 80 out of a possible score of 100. Physicians' scores were above an average of 20 on seven need items; that is, more than 20% of patients expressed a need for these services. Items with low patient-opinion scores and high patient-need scores are shown in Table 1. Many of these items concerned the patients' desire for more information, such as costs of procedures, drug side effects, or postoperative recovery.

Major Analyses

Claims and specialty as predictors. The number of claims was not significant in any of the analyses, nor was the interaction between claims and specialty. Specialty was a significant predictor of patient opinion in four of seven analyses: for Understanding and Empathy ($f[3, 85] = 13.34, P < .001$), Helpfulness of Office Assistants ($f[2, 71] = 4.13, P < .03$), Explanations ($f[3, 85] = 3.21, P < .03$), and Absence of Communication Problems ($f[3, 85] = 7.70, P < .001$). Table 2 shows the mean of each specialty on all patient-opinion scales, adjusted for number of years in practice. The means of specialties that were significantly different are indicated. The overall mean on the Explanations scale was below 80, suggesting that this was an area that generally needed improvement. General surgeons had significantly higher mean scores than other specialists on most scales, and anesthesiologists or orthopedists generally had lower mean scores. Obstetrician-gynecologists fell between—usually closer to the level of the general surgeons.

Claims and patient sex as predictors. No significant main effects were found. Two significant interaction effects were obtained between number of claims and patient sex. These were for Explanations ($f[1, 76] = 4.80, P < .04$) and Absence of Communication Problems ($f[1, 76] = 4.15, P < .05$). The interactions are shown in Figure 1. The pattern of interactions for these two patient-opinion scales is similar. Female patients of physicians with fewer claims and male patients of physicians with more claims tended to be more satisfied with their physicians' explanations and communication style.

Claims and patient age as predictors. One significant main effect was obtained for age, for Patient Need for Services and Information ($f[1, 99] = 5.33, P < .03$). Younger patients wanted more services and information (mean = 23.40) than did older patients (mean = 15.84). There were no other significant effects.

Claims and patient education as predictors. No significant main effects were found. Two significant interactions between number of claims and education were obtained, for Explanations ($f[1, 103] = 5.12, P < .03$) and for Absence of Communication Problems ($f[1, 103] = 5.41, P < .03$). Figure 1 shows the interaction effects. The interaction effects between claims and education are for the same scales as the interaction effects between claims and sex. The pattern of effects is parallel, with men and less-educated patients evaluating physicians similarly and women and more-educated patients evaluating physicians similarly.

Discussion

It has long been speculated that poor communication between physicians and patients is the basis for many malpractice claims, meritorious or not. The results of this study suggest that a relationship does exist between patient opin-

TABLE 1.—*Patient Perception of Medical Care*

Opinion Items With Lowest Rankings	*Mean Score**
Cost of procedure was as expected	49
Patient told enough about drug side effects	51
Pain after the procedure was as expected	61
Patient told enough about condition	66
Preferred to wait for own physician rather than see on-call physician	67
Patient was comfortable asking advice about sex (Obstetrics only)	71
Patient willing to phone physician about problems	73
Patient usually seen in office within 15 minutes	73
Referring physician and this physician seemed to be in contact	73
Late appointments were always explained	74
Complications after surgical procedure were not unexpected	76
Physician took time to tell patients how they are doing	77
Patient knew whether to see referring physician or this physician	77
Patient told about alternate treatment	78
Patient told enough about how drug prescribed helps condition	78
Need Items With Highest Rankings	*Patients, %*
Patient would like reading materials about condition	33
Patient would like counseling about diet	23
Patient would like information about prescribed medications	22
Patient would like information about health and life-style	21
Patient would like information about own anatomy and physiology (Obstetrics only)	21
Patient would like counseling about condition	21
Patient would like to learn about breast self-examination (Obstetrics only)	21

*A six-point scale was used, with the scales scored from 0 to 100.

TABLE 2.—*Mean Scores of Each Specialty on Patient Satisfaction Scales**

Specialty	Scale						
	Understanding	*Competence*	*Access*	*Office Staff*	*Explanation*	*Communication*	*Needs*
General surgery	88†	92	89	88†	70†	86†	18
Orthopedics	84	88	83	82‡	64‡	84	19
Obstetrics-Gynecology	85†	90	87	85	69†	89†	21
Anesthesia	76‡	90	..	..	65	81‡	21

*A six-point scale was used, with the scales scored from 0 to 100.
†Mean score of this specialty is significantly higher.
‡Mean score of this specialty is significantly lower.

ions of physician communication and physicians' history of malpractice claims. This relationship, however, is complex: female patients and more highly educated patients evaluate their physicians in the hypothesized direction. That is, they are more satisfied with physicians who have fewer claims. In contrast, male patients and less educated patients are more satisfied with physicians who have more claims. These differences were found for two of the seven scales that were examined: Explanations and Absence of Communication Problems. Physicians' scores on Explanations were consistently lower than on the other scales, suggesting that patients are less satisfied with the information they receive about their condition than with any other area of communication with their physicians. General surgeons and obstetrician-gynecologists also receive higher patient-opinion ratings than orthopedists and anesthesiologists.

The ability to generalize about these findings is limited because of several methodologic considerations. First, the identification of patients was delegated to physicians' office staffs. The importance of selecting a consecutive sample of patients was stressed to office staff so that any bias in the sample towards more-satisfied patients would be diminished. Second, the physician response to the invitation to participate was 26%. Although this response rate is not ideal, it is reasonable for this type of study. Nonrespondents tended to have fewer claims and apparently did not think participation would be useful. The patients' response rate of 68% is similar to that obtained in another study using a mailed survey; that study also found that nonrespondents were more satisfied with their care.[14] Thus, the sample bias in this study is probably towards more dissatisfied patients. Third, this study does not distinguish between open and closed claims since a significant proportion of the claims had not been settled and since we were more interested in characteristics that lead patients to file a claim, meritorious or not.

Our finding of a relationship between sex and physicians' malpractice history for the Explanation and Communications scales can be only partially explained. If physicians with fewer claims are better communicators than those with more claims, then female patients and patients with more education may have been sensitive to this and, therefore, may have given better scores to physicians with fewer claims. There is evidence to support this speculation. Resident physicians give more explanations to female patients than to male patients and to better educated patients than to those who are less educated.[5,15] The finding that men and less-educated patients prefer physicians who have more claims might be explained by a tendency for these patients to favor a more authoritarian, dependent relationship with their physicians.

Length of contact is another important issue in physician-patient communications. Whereas women patients often have seen their obstetrician-gynecologists for many years, patients usually meet their anesthesiologists the day before an operation. This brief duration of contact may ex-

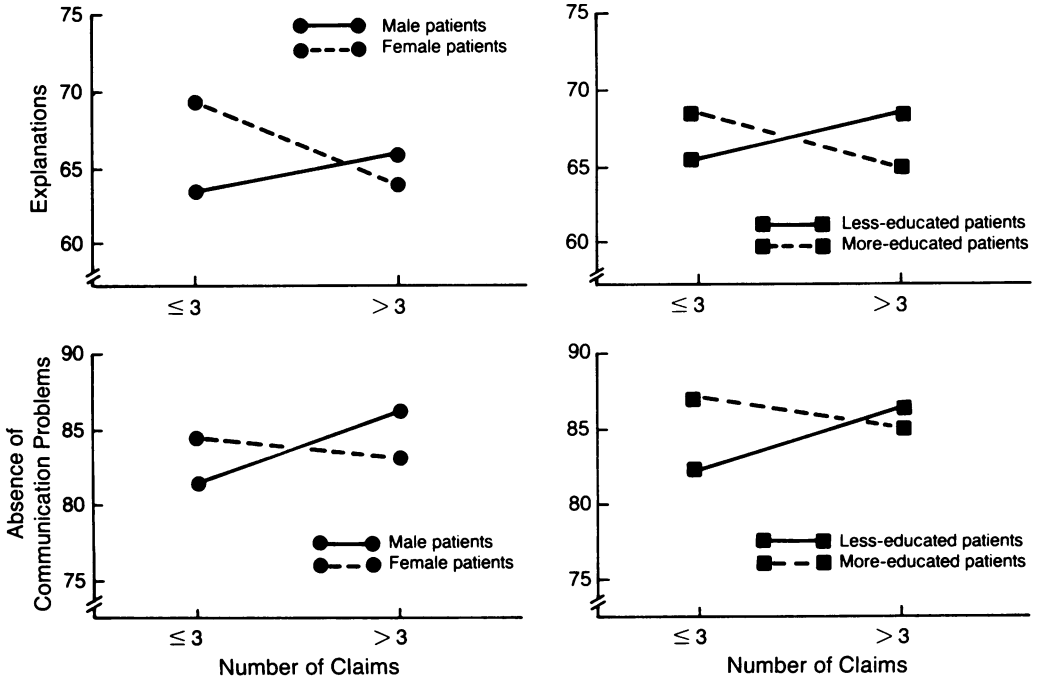

Figure 1.—Patient opinion scores are shown for physicians with few or many malpractice claims, by patient sex and education.

plain the low scores obtained by anesthesiologists in comparison with other specialists. These physicians may need to learn to develop rapport quickly with a patient in the stressful preoperative situation, especially with the advent of more ambulatory surgical treatment.

Another important finding of this study was that the mean score of the Explanation scale was 20 points lower than that of the other scales. This suggests that physicians do not adequately explain aspects of care related to the nature of procedures, their risks, complications, cost, or postoperative discomfort. These findings are consistent with reports by other investigators.[5-7] A lack of adequate information may cause patients to have unrealistic expectations about outcomes; when these expectations are unmet, patients may be more likely to file a malpractice claim. Case law over the past 20 years requires that patients be instructed about procedures and assumes that patients understand what they have been told.[16] Adequately informing patients about their conditions may facilitate forming realistic expectations concerning the outcomes of medical care. Previous research has suggested that more complete preoperative explanations could decrease morbidity, medication use, and length of hospital stay.[17,18] An additional solution would be to educate the public to ask their physicians more questions. This was done with a group of hypertensive patients, resulting both in more communication and a reduction in blood pressure levels when compared with a control group.[19] Patients who speak more during office visits are also more satisfied with their physicians.[20]

Our findings have educational implications for practicing physicians and their professional liability carriers. Physicians must learn to adapt their communication styles to the individual variations in their patients' intellectual and emotional needs. When a patient prefers less explanation, care must be taken to see that adequate informed consent is given. In this study, the inverse perceptions reported by male and female patients and more- and less-educated patients about physicians with few and many claims reinforces the importance of this. McCaughrin also stresses that standard messages cannot be given to all patients.[16]

Our study, which explores the application of survey methods in the area of malpractice claims, is an initial step toward understanding the complicated interplay of communication between physicians and patients, patient satisfaction, and malpractice claims.

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